CLINICAL AND EXPERIMENTAL IMMUNOLOGY

AN OFFICIAL JOURNAL OF THE
BRITISH SOCIETY FOR IMMUNOLOGY

Editor
J. L. TURK

Editorial Board

B. ALBINI
G. L. ASHERSON
K. F. AUSTEN
J. F. BACH
R. W. BALDWIN
R. ST. C. BARNETSON
J. R. BATCHELOR
M. C. BERENBAUM
G. F. BOTTAZZO
J. BROSTOFF
D. L. BROWN
D. CATOVSKY
A. J. DAVIES
A. M. DENMAN
J. M. DWYER
T. FEIZI
A. FERGUSON
A. HAMBLIN
E. J. HOLBOROW
G. HOLM
G. JANOSSY
S. KATZ
A. B. KAY
S. KNIGHT
P. H. LAMBERT
T. LEHNER
R. J. LEVINSKY
N. R. LING
P. M. LYDYARD
R. N. MAINI
C. A. MIMS
J. MOWBRAY
J. NEWSOM-DAVIS
G. PANAYI
W. E. PARISH
D. M. V. PARROTT
P. Y. PATERSON
M. PEPYS
A. J. PINCHNG
T. A. E. PLATTS-MILLS
L. POULTER
M. REICHLIN
J. F. SOOTHILL
C. SPRY
G. STEVENSON
G. A. T. TARGETT
R. A. THOMPSON
R. VAN FURTH
M. H. WANSBOROUGH-JONES
A. D. B. WEBSTER
P. C. WILKINSON
R. WILLIAMS

VOLUME 59

Pages 1–734

BLACKWELL SCIENTIFIC PUBLICATIONS
OXFORD LONDON EDINBURGH BOSTON PALO ALTO MELBOURNE

1985

© 1985 Blackwell Scientific Publications
Osney Mead, Oxford OX2 0EL
8 John Street, London WC1N 2ES
9 Forrest Road, Edinburgh EH1 2QH
52 Beacon Street, Boston, Mass. 02108, USA
706 Cowper Street, Palo Alto, Calif. 94301, USA
99 Barry Street, Carlton, Victoria 3052, Australia

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright owner.

Printed in Great Britain at the Alden Press, Oxford

CONTENTS

VOLUME 59 · NUMBER 1 · JANUARY 1985

MEINER G. JONES & G. HARRIS: Prolongation of life in female NZB/NZW (F_1) hybrid mice by cyclosporin A 1

ROSEMARY A. HASSMAN, C. DIEGUEZ, D. P. RENNIE, A. P. WEETMAN, R. HALL & A. M. MCGREGOR: The influence of cyclosporin A on the induction of experimental autoimmune thyroid disease in the PVG/c rat 10

D. M. ALTMANN & W. A. BLYTH: The effects of cyclosporin A on the induction, expression and regulation of the immune response to Herpes simplex virus 17

R. D. ALDRIDGE, A. W. THOMSON, ROSSLYN RANKIN, P. H. WHITING, C. CUNNINGHAM & J. G. SIMPSON: Inhibition of contact sensitivity reactions to DNFB by topical cyclosporin application in the guinea-pig 23

L. K. BORYSIEWICZ, P. CASALI, B. ROGERS, S. MORRIS & J. G. P. SISSONS: The immunosuppressive effects of measles virus on T cell function—failure to affect IL-2 release or cytotoxic T cell activity *in vitro* 29

L. TAKACS, H. OSAWA, I. TÖRÖ & T. DIAMANTSTEIN: Immunohistochemical localization of cells reacting with monoclonal antibodies directed against the interleukin-2 receptor of murine, rat and human origin 37

T. AKIYOSHI, F. KOBA, S. ARINAGA, S. MIYAZAKI, T. WADA & H. TSUJI: Impaired production of interleukin-2 after surgery 45

A. GRYGLEWSKI, J. MARCINKIEWICZ, T. POPIELA & W. PTAK: Effect of surgical trauma (gastrectomy) on cell-mediated and humoral responses in mice 50

S. K. SMITH, VIVIENNE A. BROWN, A. EDNA DEWAR, G. STOCKDILL, B. COHEN & A. H. MADDY: Abnormalities in the expression of the leucocyte–common antigen in chronic lymphocytic leukaemia 55

A. T. ICHIKI, C. J. WUST & CARMEN B. LOZZIO: Characterization of the Fc (IgG) receptor on the pluripotential leukaemia cell K-562 64

GRACE DE BOCCARDO, D. DRAYER, A. RUBIN, A. NOVOGRODSKY, M. M. REIDENBERG & K. H. STENZEL: Inhibition of pokeweed mitogen-induced B cell differentiation by compounds containing primary amine or hydrazine groups 69

LINDA F. THOMPSON, H. L. SPIEGELBERG & R. H. BUCKLEY: IgE Fc receptor positive T and B lymphocytes in patients with the hyper IgE syndrome 77

T. TIMONEN & BRITA STENIUS-AARNIALA: Natural killer cell activity in asthma 85

MAUREEN M. DAWSON, URSULA SHIPTON & M. MOORE: Involvement of cell surface macromolecules sensitive to alkylating ketones in lysis by human peripheral blood NK cells 91

FRANCES C. RAWLE, T. A. E. PLATTS-MILLS & E. B. MITCHELL: Quantitative aspects of the T cell proliferation response to antigen P_1 from *D. pteronyssinus*: suppression by added histamine and limited effects of basophil depletion 101

J. MALEJCZYK, M. J. KAMIŃSKI, MAGDALENA MALEJCZYK & S. MAJEWSKI: Natural cell-mediated cytotoxic activity against isolated chondrocytes in the mouse 110

J. H. L. PLAYFAIR, J. B. DE SOUZA, P. R. HUTCHINGS & A. COOKE: Partial cross-reactivity by suppressor cells induced during different experimental autoimmune diseases 117

N. MAFUNE, NORIKO IDETA, H. WATABE, H. NAGURA & K. KOBAYASHI: Occurrence of cytotoxic autoantibody in rabbits by immunization with heterologous liver arginase: a possible implication in the mechanism of the autoimmune liver diseases 123

Y. KANAI & M. FUJIWARA: Naturally occurring antibodies to poly (ADP-ribose) in autoimmune MRL/Mp-lpr/lpr mice 132

Y. KANAI, T. AKATSUKA, T. KUBOTA, S. GOTO & B. D. STOLLAR: MRL/Mp-lpr/lpr mouse derived monoclonal antibodies that recognise determinants shared by poly (ADP-ribose), single stranded DNA and left handed Z-DNA 139

F. FURUKAWA, N. MARUYAMA, H. YOSHIDA, Y. HAMASHIMA, SACHIKO HIROSE & T. SHIRA: Genetic studies on the skin lupus band test in New Zealand mice 146

JONNI MORRE & CATHERINE CALKINS: Specific anti-erythrocyte focus formation as a measure of autoantibody secreting cells in NZB mice 153

M. FUJIWARA, AI KARIYONE & M. SHIRAKI: Studies on the role of the *lpr* gene in the development of immunological abnormalities and lupus nephritis. Analyses in F_2 mice 161

MARYVONNE DUEYMES, GILBERT J. FOURNIE, FRANÇOISE CARENTZ, MADELEINE MIGNON-CONTE, J.-F. LABARRE & J. J. CONTE: *In vivo* modulation of polyclonal activation of lymphocytes by SOAz, a cyclophosphazene derived drug. Prevention of murine glomerulonephritis induced by chronic injections of lipopolysaccharide 169

M. MARINA GHEORGHIU, DENISE MOUTON, H. LECOEUR, MICHELINE LAGRANDERIE, J. C. MEVEL & G. BIOZZI: Resistance of high and low antibody responder lines of mice to the growth of avirulent (BCG) and virulent ($H_{37}Rv$) strains of mycobacteria 177

F. CALIGARIS-CAPPIO, LUCIANA BERGUI, LUISA TESIO, ROSANGELA ZIANO & G. CAMUSSI: HLA-Dr^+ T cells of the Leu 3 (helper) type infiltrate the kidneys of patients with systemic lupus erythematosus 185

ANNE M. OLIVER & D. M. WEIR: The effect of *Pseudomonas* alignate on rat alveolar macrophage phagocytosis and bacterial opsonization 190

P. J. STANLEY & P. J. COLE: The concentrations of IgA and free secretory piece in the nasal secretions of patients with recurrent respiratory infections 197

S. MATSUO, A. NAKAGAWARA, K. IKEDA, M. MITSUYAMI & K. NOMOTO: Enhanced release of reactive oxygen intermediates by immunologically activated rat Kupffer cells 203

W. PIERPAOLI: Growth of transplantable melanoma and leukaemia and prevention of virus-induced leukaemia in long lived radiation chimeras constructed with unmanipulated bone marrow 210

R. U. SORENSEN, T. C. HALPIN, C. R. ABRAMOWSKY, D. L. HORNICK, K. M. MILLER, P. NAYLOR & G. S. INCEFY: Intestinal lymphangiectasia and thymic hypoplasia 217

A. WHYTE, N. RAGGE, Y. W. LOKE & L. THIRY: Human syncytiotrophoblast membrane proteins defined using heterologous antiserum 227

MARILYN L. BALTZ, R. F. DYCK & M. B. PEPYS: Studies of the *in vivo* synthesis and catabolism of serum amyloid P component (SAP) in the mouse 235

MARILYN L. BALTZ, I. F. ROWE & M. B. PEPYS: *In vivo* turnover studies of C-reactive protein 243

Letters to the Editor

K. GUY & C. M. STEEL: Interpretation of the specificities of monoclonal antibodies recognizing human MHC class II antigens 251

S. A. ROBERTS & R. J. LEVINSKY: Correction to an earlier published paper 255

VOLUME 59 · NUMBER 2 · FEBRUARY 1985

G. JANOSSY, A. J. PINCHING, M. BOFILL, J. WEBER, J. E. MCLAUGHLIN, M. ORNSTEIN, K. IVORY, J. R. W. HARRIS, M. FAVROT & D. C. MACDONALD-BURNS: An immunohistological approach to persistant lymphadenopathy and its relevance to AIDS 257

H. H. EULER, P. KERN, H. LÖFFLER & M. DIETRICH: Precipitable immune complexes in healthy homosexual men, acquired immune dificiency syndrome and the related lymphadenopathy syndrome 267

S. MERI: Complement activation by circulating serum factors in human glomerulonephritis 276

C. J. ELSON, S. D. CARTER, B. J. COTTRELL, D. G. I. SCOTT, P. A. BACON & T. B. WALLINGTON: Complement activating properties of complexes containing rheumatoid factor in synovial fluids and sera from patients with rheumatoid arthritis 285

S. MIYAZAKI, K. KAWASAKI, E. YAOITA, T. YAMAMOTO & I. KIHARA: Bovine serum albumin (BSA) nephritis in rats. III. Antigen distribution in various organs 293

P. RUUSKA, SYLVI SILVENNOINEN-KASSINEN, T. TIMONEN & ANJA TIILKAINEN: Chronic myelocytic leukaemia: HLA association and decreased erythrocyte C3b receptor expression 300

D. Delia, G. Cattoretti, A. Bonati, Silvia Villa, F. De Braud & M. Buscaglias: Detection of the common acute lymphoblastic leukaemia antigen (CALLA) on B cells from human fetal tissues. A multiple phenotypic characterization 305

L. J. Murray, S. Dhut, L. C. Walker, M. Rainey & J. A. Habeshaw: Two monoclonal antibodies raised against a Burkitt lymphoma cell line recognise different cell types within lymphoid follicles 315

H. H. Nissen, T. Plesner, J. K. Larsen, B. K. Olesen & P. Ernst: Enhanced expression *in vivo* of HLA-ABC antigens and β_2-microglobulin on human lymphoid cells induced by human interferon-α in patients with lung cancer. Enhanced expression of class I major histocompatibility antigens prior to treatment 327

N. J. Calvanico & J. C. Garancis: Specificity and duration of post-inflammatory suppression in rabbit lungs challenged with aerosolized antigen 336

D. C. Henderson, D. M. Moran & A. W. Wheeler: Differential suppressive influence of intranasal application of rye grass pollen extract on IgE antibody production in the mouse 343

A. Willemse, Alie Noordzij, V. P. M. G. Rutten & W. E. Bernadina: Induction of non-IgE anaphylactic antibodies in dogs 351

A. Willemse, Alie Noordzij, W. E. Van Den Brom & V. P. M. G. Rutten: Allergen specific IgG_d antibodies in dogs with atopic dermatitis as determined by the enzyme linked immunosorbent assay (ELISA) 359

H. Sawada, T. Suou & C. Hirayama: Cellular sensitivity to collagen in liver disease 364

H. Helin, R. Uibo, I. Paronen & K. Krohn: Immunohistochemical localization of human liver specific protein using rabbit antisera and the avidin–biotin complex technique 371

R. Kennedy, U. Di Mario, P. Pozzilli, K. Guy, M. Leonardi, M. Sensi & D. Andreani: Activated T cells in Graves' disease before treatment 377

Jia Newcombe, Susan Gahan & M. Louise Cuzner: Serum antibodies against central nervous system proteins in human demyelinating disease 383

Greta Vervliet, H. Carton & A. Billiau: Interferon-γ production by peripheral blood leucocytes from patients with multiple sclerosis and other neurological diseases 391

B. K. Pelton & A. M. Denman: Immunoregulatory effects of interferon-α. I. Interferon-α inhibits *in vitro* antibody synthesis by normal human lymphocytes 398

J. K. Onwubalili, G. M. Scott & J. A. Robinson: Deficient immune interferon production in tuberculosis 405

G. A. W. Rook, B. R. Champion, J. Steele, A. M. Varey & J. L. Stanford: I-A restricted activation by T cell lines of anti-tuberculosis activity in murine macrophages 414

I. C. Bygbjerg, S. Jepsen, T. G. Theander & N. Ødum: Specific proliferative response of human lymphocytes to purified soluble antigens from *Plasmodium falciparum in vitro* cultures and to antigens from the malaria patients' sera 421

Marlene M. Bunn-Moreno, Eliana D. Madeira, Kathleen Miller, Jaqueline A. Menezes & A. Campos-Neto: Hypergammaglobulinaemia in *Leishmania donovani* infected hamsters: possible association with a polyclonal activator of B cells and with suppression of T cell function 427

G. Ohshio, F. Furukawa, K. Sekita, T. Manabe, T. Tobe & Y. Hamashima: IgA containing circulating immune complexes and IgA anti-single stranded DNA antibodies in patients with obstructive jaundice 435

M. Th. Labro-Bryskier, C. Babin-Chevaye & J. Hakim: New lymphokines produced by SLE sera stimulated lymphocytes: the PNAF (polymorphonuclear activating factors) 442

C. B. Colaço & D. K. Male: Anti-phospholipid antibodies in syphilis and a thrombotic subset of SLE: distinct profiles of epitope specificity 449

W. J. Habets, D. J. de Rooij, Margot H. Hoet, L. B. van de Putte & W. J. van Venrooij: Quantitation of anti-RNP and anti-Sm antibodies in MCTD and SLE patients by immunoblotting 457

J. P. Fermand, Françoise Danon & J. C. Brouet: Characterization of a human monoclonal IgM with antibody activity to dsDNA 467

Meinir G. Jones & F. C. Hay: The isotype and specificity of antiglobulins in BALB/c mice 475

H. M. LEDERMAN, J. W. W. LEE & E. W. GELFAND: The origin of T cell colonies from T depleted human lymphocyte populations: analysis by limiting dilution 482
J. A. BRIEVA, JULIA SEQUI, J. M. ZABAY, ANA PARDO, A. CAMPOS, M. LUZ DE LA SEN & A. BOOTELLO: Abnormal B cell function in haemophiliacs and their relationship with factor concentrates administration 491
G. SANDBERG & M. BJÖRKHOLM: A simple method for electronic counting of rosette forming human blood lymphocytes 499
T. MIYAWAKI, H. SEKI, K. TAGA, H. SATO & N. TANIGUCHI: *Brief communication*: Dissociated production of interleukin-2 and immune (γ) interferon by phytohaemagglutinin stimulated lymphocytes in healthy infants 505
EDITORIAL NOTICES 512

VOLUME 59 · NUMBER 3 · MARCH 1985

B. M. GREENWOOD, I. MOHAMMED & H. C. WHITTLE: Immune complexes and the pathogenesis of meningococcal arthritis 513
B. COMBE, R. M. POPE, M. FISCHBACH, BARBRA DARNELL, S. BARON & N. TALAL: Interleukin-2 in rheumatoid arthritis: production of and response to interleukin-2 in rheumatoid synovial fluid, synovial tissue and peripheral blood 520
D. G., PALMER, Y. SELVENDRAN, CATHERINE ALLEN, P. A. REVELL & NANCY HOGG: Features of synovial membrane identified with monoclonal antibodies 524
R. HÄLLGREN, N. FELTELIUS, KARIN SVENSON & P. VENGE: Eosinophil involvement in rheumatoid arthritis as reflected by elevated serum levels of eosinophil cationic protein 539
M. J. WALPORT, G. D. ROSS, C. MACKWORTH-YOUNG, J. V. WATSON, NANCY HOGG & P. J. LACHMANN: Family studies of erythrocyte complement receptor type 1 levels: reduced levels in patients with SLE are acquired, not inherited 547
P. G. TIPPING & S. R. HOLDSWORTH: The mechanism of action of corticosteroids on glomerular injury in acute serm sickness in rabbits 555
R M. SCOTT, J. HOW, LINDA M. GERRIE, A. S. M. KHIR, P. D. BEWSHER, C. H. W. HORNE & A. W. THOMSON: Serum levels of pregnancy, associated α_2-glycoprotein (α_2-PAG) during pregnancy in autoimmune thyroid disease: relationship to disease activity 564
P. PHANUPHAK, MATTANA HANVANICH, REUTAI SAKULRAMRUNG, P. MOOLLAOR, V. SITPRIJA & P. PHANTHUMKOSOL: Complement changes in falciparum malaria infection 566
R. MOQBEL, A. J. MACDONALD & A. B. KAY: Enhancement of human eosinophil- and neutrophil-mediated killing of schistosomula of *Schistosoma mansoni* by reversed type (IgE-mediated) anaphylaxis, *in vitro* 577
SANDRA M. MCLACHLAN, G. PROUD, C. A. S. PEGG, F. CLARK & B. REES SMITH: Functional analysis of T and B cells from blood and thyroid tissue in Hashimoto's disease 585
E. TOULLET, F. CHADENIER, J. L. MAILLARD & G. A. VOISIN: Cellular transfer of autoimmune aspermogenic orchiepididymitis (AIAO) by the i.v. route in the guinea pig 593
R. C. GUPTA: Specificities and characteristics of mitochondrial protein antigens assessed by enzyme linked immunosorbent assay for anti-mitochondrial antibodies. Relationship to immunofluorescent and precipitating antibodies 604
URSULA KÖLLER, O. MAJDIC, K. LISZKA, H. STOCKINGER, INGRID PABINGER-FASCHING, K. LECHNER & W. KNAPP: Lymphocytes of haemophilia patients treated with clotting factor concentrates display activation linked cell surface antigens 613
H. O. BESEDOVSKY, ADRIANA DEL REY, E. SORKIN, W. LOTZ & U. SCHWULERA: Lymphoid cells produce an immunoregulatory glucocorticoid increasing factor (GIF) acting through the pituitary gland 622
ANNE C. FAY, A. TRUDGETT, J. M. THOMPSON & T. A. MCNEILL: Human B cell colony growth from pre-B cells *in vitro* 629
A. TRUDGETT, ANNE C. FAY, J. M. THOMPSON & T. A. MCNEILL: Biochemical and

physiochemical characteristics of a pre-B cell stimulating factor produced by the plasmacytoma cell line LICR LON HMY2 637

A. DANERSUND, T. H. TÖTTERMAN, K. NILSSON, INTA EGLE-JANSSON, D. KABELITZ & O. SJÖBERG: Phorbol ester-induced differentiation of chronic B lymphocytic leukaemia cells—regulatory impact of autologous and allogeneic accessory cells 644

ANGELA C. HANGLOW & P. M. LYDYARD: The effect of 2′deoxyguanosine on human lymphocyte responses. I. 2′deoxyguanosine enhances T lymphocyte responses 653

ANGELA C. HANGLOW & P. M. LYDYARD: The effect of 2′deoxyguanosine on human lymphocyte responses. II. 2′deoxyguanosine enhances PWM-induced B cell differentiation 659

J. ALCOCER-VARELA, E. MARTINEZ-CORDERO & D. ALARCON-SEGOVIA: Spontaneous production of, and defective response to, interleukin-1 by peripheral blood mononuclear cells from patients with scleroderma 666

J. BOHNSACK, H. D. OCHS, R. J. WEDGEWOOD & S. R. HELLER: Antibody to bacteriophage ϕX 174 synthesized by cultured human peripheral blood lymphocytes 673

KAYHAN T. NOURI-ARIA, AVA LOBO-YEO, D. VERGANI, GIORGINA MIELI-VERGANI, A. P. MOWAT & A. L. W. F. EDDLESTON: Immunoregulation of immunoglobulin production in normal infants and children 679

VICTORIA UREÑA, I. MONEO, MANUELA CUEVAS, ISABEL REYMUNDO, M. LUZ DIEZ GOMEZ, E. ALVAREZ CUESTA & A. BOOTELLO: Antigen-induced inhibition of human *in vitro* spontaneous IgE synthesis. I. Factors and kinetic studies 687

R. HEIKKILÄ, E. RUUD, S. FUNDERUD & T. GODAL: Differences in modifications of cytoplasmic free Ca^{2+} concentration and $^{86}Rb^{+}$ influx in human neoplastic B cells by antibodies to μ- relative to δ-Ig heavy chains 695

P. J. CICLITIRA, H. J. ELLIS, D. J. EVANS & E. S. LENNOX: A radioimmunoassay for wheat gliadin to assess the suitability of gluten free foods for patients with coeliac disease 703

H. W. ROENHORST, J. M. MIDDELDORP, JOSÉ M. BEELEN, J. SCHIRM, A. M. TEGZESS & T. H. THE: Maintenance of cytomegalovirus (CMV) latency and host immune responses of long term renal allograft survivors. I. Prolonged suppression of *in vitro* lymphocyte responses against CMV infected fibroblasts related to previous secondary CMV infection 709

J. E. PIECHURA, V. P. KURUP, J. N. FINK & N. J. CALVANICO: Antigens of *Aspergillus fumigatus*. III. Comparative immunochemical analyses of clinically relevant aspergilli and related fungal taxa 716

AUTHOR AND SUBJECT INDEXES FOR VOLUME 59 725